

TECHNICAL NOTE

DIOXIN CONTAMINATION IN COPPER PRODUCTS



The purpose of this Technical Note is to provide an update on some more recent impurity discoveries – namely DIOXINS – in some copper-based products.

Dioxins first hit the headlines when they were discovered in 2,4D, 245T and Trifluralin. More recently these contaminants have been discovered in meat exports, resulting in their rejection and bans being placed on farms. The issue is such that a dedicated Dioxin International Conference has just been held in Japan.

Melpat has consistently provided ‘clean’ products and has environmental concerns at the forefront.

In 1991, Melpat Coppox® was registered. At that time we were aware of the likelihood of heavy metal impurities and consequently the aim was to provide a product at 70% below the maximum permissible levels.

The recently released Coppox® WG for example has lead levels less than 10% of the maximum levels, i.e. 23ppm.

The more recently discovered dioxin levels were first highlighted when meat exports were analyzed. The shipment of meat was rejected. Not only were the exports rejected but the farms were quarantined.

Example 1

“A total of 650 pig and poultry farms are now under quarantine in 3 countries...”
(Ref: Article – “EU sets Dioxin and PCB Levels for Food and Feed”)

This particular dioxin source was traced to a copper sulphate which was manufactured in China and used as a feed supplement.

Example 2

*“...One delegation raised the issue of the export of non-authorized feed additives.
Dioxins in copper sulphate as a follow-up: The Irish delegation updated the commission on the situation.*



Summary information gathered from the company concerned on the product in which the copper sulphate contaminated with Dioxin/ PCB was used was as follows:

- Bioplex Copper shipped to Europe from Canada: 208mt.
- Bioplex Copper distributed to member states and Turkey (4 mt to Turkey).
- Bioplex Copper which remained in the company's stores: 100mt.
- Bioplex Copper recalled following the Rapid Alert System for Food and Feed: 47mt.
- Bioplex Copper used to make pre-mixtures: 61mt.

The company also advised that, although not officially confirmed, it was thought that the reason for the contamination is the practice of recycling copper wire from electrical transformers. These transformers are insulated with PCB's and apparently were not removed in the recycling process in China..."

(Ref: Summary Minutes of the Meeting of the Standing Committee on the Food Chain & Animal Health – Brussels 20 April 2007).

Melpat Copper Sulphate has EU Animal Feed Grade classification status.

'Clean' copper-based feed supplements are as important as the spraying of crops – and our environment – with a 'clean' product.

Additional information on this subject can be sourced through the Melpat office, or simply Google the subject.

